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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,023

07/25/2003

Zhi-Min Choo

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EXAMINER

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PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/627,023	Applicant(s) CHOO, ZHI-MIN	
	Examiner Nhan T. Tran	Art Unit 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/25/2003, 8/24/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-28 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 8, 11, 13-17, 20, 22, 24, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 9, 10, 12, 18, 19, 21 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 8/2/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Objections***

3. Claims 4 & 8 are objected to because of the recitation of "the means for optical zoom" which should be corrected to read as -- a means for optical zoom --. Further in claim 8, the word "comprise" should be corrected to read as -- comprises --.

Claim 9 is objected to because of the recitation of "a plurality of longitudinal grooves is formed" which should be corrected to read as -- a plurality of longitudinal grooves are formed --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7, 11, 13-15, 20, 22, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7, 11, 13-15, 20, 22 and 24 are improper hybrid claims calling for both apparatus (as in corresponding independent claims) and method steps of using the apparatus. Thus, claims 7, 11, 13-15, 20, 22 and 24 render indefinite. See MPEP 2173.05(p).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 16, 17, 29 & 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. (US 6,690,417).

Regarding claim 1, Yoshida discloses a mobile communication terminal (camera cell phone 100 shown in Fig. 1, col. 5, lines 24-30) with an integrated photographic apparatus (a CCD camera behind lens 108 shown in Fig. 6), the mobile communication terminal comprising:

a body having a front, a back, and at least one side (see Fig. 1 and note that the front surface is interpreted as the side where numeric keys are located, and the side surface is indicated by the surface where the lens 108 and buttons 102, 101 are located);

a plurality of terminal manipulation devices (keypads shown in Figs. 1 & 2);

a display (107) for reproducing an image created by the photographic apparatus having means for optical zoom (by zoom lens 108), wherein the photographic apparatus is mounted on the body of the mobile communication terminal so that the photographic apparatus faces laterally outward from the at least one side (see Figs. 1 & 2; col. 5, lines 41-48; col. 6, lines 18-24 and col. 7, lines 26-34).

Regarding claim 16, Yoshida clearly discloses that the body further comprising: a lower body (main body shown in Fig. 1); an upper body (body of display device 107 shown in Figs. 1 & 2); and a hinge the rotatively connects the lower body to the upper body, wherein the photographic apparatus is installed facing outwardly from a lateral side of the hinge (see Figs. 1 & 2).

Regarding claim 17, Yoshida also discloses a folding-type mobile communication terminal (see Figs. 1 & 2 for a folding-type camera cell phone 100; col. 5, lines 24-30) comprising: an upper body having a display (107); a lower body having a plurality of keypads (numerical keypads 103, 102, 110); a hinge that rotatively connects the lower body to the upper body; and an optical zoom camera (indicated by lens 108) installed

facing outwardly from a lateral side of the hinge (see Figs. 1 & 2; col. 5, lines 41-48; col. 6, lines 18-24 and col. 7, lines 26-34).

Regarding claims 29 & 30, Yoshida clearly discloses an optical camera (at lens 108 shown in Figs. 1 and 6) configured to be installed in a mobile communication device (a camera cell phone as discussed in claim 1), the optical camera comprising: a photographic apparatus mounted on the device such that the photographic apparatus faces outwardly from a lateral side of the device; and means for optical zoom (see Fig. 1 and col. 7, lines 26-34).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US 6,690,417) in view of Funahashi (US 6,115,197).

Regarding claim 2, Yoshida discloses that the photographic apparatus further comprises a camera (CCD 213 placed behind lens 108; see Fig. 6); a lens (108) having a diameter; and a housing (inherent as shown in Fig. 1) to receive the lens, the camera, wherein the housing has an internal surface.

Yoshida does not explicitly disclose a lens cap which is received inside the housing. However, Funahashi teaches a zoom lens barrel for a camera comprising a lens (16) enclosed by a lens cap (lens frame 3 and 2) which is received inside the housing of lens barrel (see Fig. 1) so as to provide a compact and low-cost zoom lens barrel composed of as few as barrels as possible in which a wide zoom range is achieved by a large angle rotation of relevant components (see Funahashi, col. 1, line 65 – col. 2, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yoshida and Funahashi to make a lens cap which would be received inside the housing as a part of zoom lens barrel so as to provide a compact and low-cost zoom lens barrel composed of as few as barrels as possible in which a wide zoom range is achieved by a large angle rotation of relevant components as taught by Funahashi above.

Regarding claim 3, Yoshida in view of Funahashi as in claim 2 also discloses the lens cap is ring shaped and has an internal diameter sufficient large so that a transmission of an image from the lens to the camera is not affected, the lens cap comprising a plurality of notches to operationally engage with the inner surface of the housing (see Funahashi, Fig. 1).

Regarding claim 4, Yoshida in view of Funahashi further discloses means for optical zoom comprises a rotation handle (indicated by rear 7 in Fig. 1 of Funahashi) in

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operative relationship with the housing such that rotation of the rotation handle results in rotation of the housing (see Funahashi, Fig. 1 and col. 4, lines 6-46).

Regarding claim 8, Yoshida in view of Funahashi further discloses means for optical zoom comprises: a controlling unit (Yoshida, col. 7, lines 26-34); a motor (Yoshida, col. 7, lines 26-34 and Funahashi, col. 6, lines 1-16; Fig. 1); a drive shaft (23 in Fig. 1 of Funahashi) having an anterior and posterior ends, wherein the posterior end is operatively connected to the motor so that the motor rotates the drive shaft; a pinion connected to the anterior end of the drive shaft; and a rack affixed to the housing and in operational relationship with the pinion so that rotation of the pinion results in longitudinal movement of the housing (see Fig. 1 of Funahashi, col. 6, lines 1-25).

#### ***Allowable Subject Matter***

7. Claims 5-6, 9-10, 12, 18-19, 21 & 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 25-28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or fairly suggest "the camera is cylindrical in shape and comprises an anterior surface on which a lens hole is formed; and a circular exterior surface on which a screw thread is formed" and "the camera is cylindrical in



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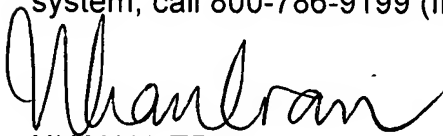
shape and comprises an anterior surface on which a lens hole is formed; and a circular exterior surface on which a plurality of longitudinal grooves [is] are formed."

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
NHAN T. TRAN  
Patent Examiner